

# ABSTRACT

Power supply systems and methods are provided. In one aspect, a power supply system includes a frame, a power input to receive input power from a power source, a power output to provide output power to a load, at least one battery module mounted in the frame and having a battery output that provides battery power, at least one power module mounted in the frame and coupled to the power input to receive the input power, coupled to the battery output to receive the battery power, and coupled to the power output to provide the output power from at least one of the battery power and the input power, a first controller coupled to the at least one power module, and a second controller, substantially similar to the first controller, coupled to the first controller, and coupled to the at least one power module, wherein each of the first controller and the second controller are configured to determine operational parameters of the power supply system and store a first set of parameters determined by the first controller and a second set of parameters determined by the second controller.